REUTILIZING METHOD OF WASTE ETCHING LIQUID FOR PRINTEDCIRCUIT **BOARD**

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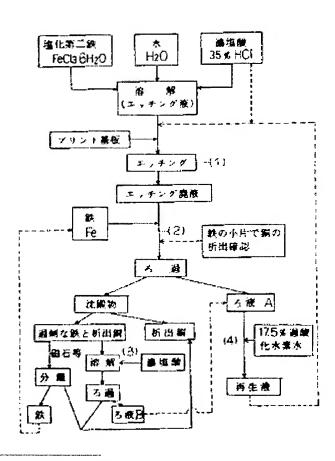
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Abstract of **JP59157283**

PURPOSE: To enable easy recycling of a waste etching liquid contg. ferrous ion and to recover copper by immersing metallic iron in said liquid to deposit and remove copper then bringing an oxidizing agent to react with said liquid thereby returning said liquid to a soln.

contg. ferric ion.

CONSTITUTION: Metallic iron such as iron powder is immersed in a waste etching liquid which consists essentially of ferric chloride and contains the ferrous ion generated after etching a copper laminated printed circuit board to deposit copper on the surface of the iron. The deposited copper is filtered away. An oxidizing agent such as about 17.5% hydrogen peroxide soln. or the like is added to the resultant filtrate to oxidize the ferrous ion to ferric ion and thereafter the filtrate is recycled as an etching liquid. The deposited copper in the precipitate obtd. by the above-mentioned filtration is recovered or the copper obtd. by mixing the same with excess iron is separated physically to iron and copper by a magnet, etc. Otherwise, a concd. sulfuric acid is added thereto to dissolve only the iron and the soln. is filtered to recover copper. The filtrate is usable as an etching soln.



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